

# Pilot Ground Theory

## Course Objective

This course is designed to *prepare students to pursue pilot career development in HK and illustrate the basic theories required as a recreation pilot by CASA*. It also provides comprehensive information about Hong Kong aviation industries.

Lesson	Content
1	Hong Kong Aviation Industry Development <ul style="list-style-type: none"> <li>- Airlines</li> <li>- Non-Airlines</li> </ul>
2	Aircraft General Knowledge <ul style="list-style-type: none"> <li>- Different types of aircraft</li> <li>- Aircraft components (external) and their working principles</li> </ul>
3	Aircraft General Knowledge <ul style="list-style-type: none"> <li>- Aircraft components (internal) and their working principles</li> </ul>
4	Aerodynamics <ul style="list-style-type: none"> <li>- Three axes of motion</li> <li>- Four forces in level, turn, climb and descend</li> <li>- Rate of climb &amp; angle of climb</li> </ul>
5	Aerodynamics <ul style="list-style-type: none"> <li>- Lift formula and its relationship with Angle of Attack, wing surface and speed</li> <li>- Stall, spin and spiral dive</li> </ul>
6	Air Law <ul style="list-style-type: none"> <li>- Airmanship</li> <li>- Air law in Australia</li> </ul>
7	Meteorology <ul style="list-style-type: none"> <li>- Precipitation</li> <li>- Weather Decoding</li> </ul>
8	Human Factors <ul style="list-style-type: none"> <li>- eyes, ears and brain</li> <li>- disorientation and illusion</li> </ul>
9	Aircraft performance <ul style="list-style-type: none"> <li>- Takeoff/landing performance</li> <li>- mass and balance, stabilities</li> </ul>
10	Radio Operations <ul style="list-style-type: none"> <li>- frequency range used in aviation</li> <li>- radiotelephony</li> </ul>
11	Navigation <ul style="list-style-type: none"> <li>- 1 in 60 &amp; different type of headings</li> <li>- Introduction to flight computer</li> </ul>
12	Examination, Demonstration and Practice
13	Insider Sharing

### Graduation Criteria:

Trainees will be awarded the Certificate if they have fulfilled the following course requirements:

- i) Attain an attendance of 80% or above;
- ii) Pass the overall assessment; and
- iii) Pass the final examination.